

Context



The renewed hostilities between the United States-led coalition (including Israel and United Arab Emirates) and Iran have tested a newly integrated regional air and missile defence network in West Asia.



Missile defence system -

It is a sophisticated, multi-layered architecture designed to detect, track, and destroy incoming ballistic and cruise missiles.



India's Missile Defence Architecture

Multi-layered Ballistic Missile Defence (BMD) system under DRDO:



The **Prithvi Air Defence (PAD)** interceptor is designed for exo-atmospheric interception to intercept incoming missiles at altitudes of 50 km to 180 km.



The **Advanced Air Defence (AAD)** interceptor is intended for endo-atmospheric interception during the terminal phase to neutralise threats within the Earth's atmosphere at altitudes up to 30 km.



Layered Air Defence Shield:



• **S-400 Triumf** is a highly advanced, mobile, Russian-developed surface-to-air missile (SAM) system inducted by India to enhance long-range air defence capability.



• **Medium-Range** (70-100 km): The Barak-8 (**MRSAM/LRSAM**), co-developed with Israel, provides **360-degree protection** for both land and naval assets.








• **Short-Range** (25-50 km): The indigenous **Akash system** and Israel's **SPYDER** protect strategic points and mobile army units.

Mission Sudarshan Chakra: Announced as a comprehensive vision for 2035, **Mission Sudarshan Chakra** aims to create an all-encompassing, AI-enabled national shield.



Key Air-Defence Systems of other countries

Country/Region	Key Systems
 Russia	S-400 Triumph, S-300VM, S-350 Vityaz, S-500 Prometheus
 USA	THAAD, Patriot (PAC-3 MSE), Golden Dome (in development)
 Israel	Iron Dome, David's Sling, Iron Beam
 China	HQ-9, HQ-22, HQ-16
 European Sky Shield Initiative (ESSI)	Skyranger, IRIS-T SLM